

Amendment Under 37 C.F.R. § 1.111
PCT/IE99/00053
USSN 09/719,807
Attorney Docket Q62334

REMARKS

In the last Office Action claim 1 was objected and claims 2, 6, 9, 12, 16, 18-20, 24 and 32 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1, 2, 6, 9, 11, 12, 16, 18-24, 31, 32, 46 and 48-50 were rejected under 35 U.S.C. § 102(b) as being anticipated by Paoli (5,228,049). Claims 1, 2, 6, 9, 11, 12, 16, 18-24, 31, 32, 46 and 48-50 have been canceled without prejudice in order to advance the prosecution of the present application and new 61-80 inclusive have been substituted therefore. Reconsideration and allowance of the application are respectfully requested in view of the following remarks.

All of the newly submitted claims have been presented in a manner to overcome the objection and rejection under 35 U.S.C. § 112, second paragraph. New claim 61 is a combination of original claims 1, 16 and 20 and clearly distinguishes the invention from the prior art of record.

It is respectfully submitted that the rejection of Claim 20 in the light of the disclosure of Paoli in U.S. Patent Specification No. 5,228,049 is incorrectly made. It is respectfully submitted that Paoli fails to disclose or suggest a semi-conductor device which comprises all the features of Claims 1 and 20. It is respectfully submitted that Paoli fails to disclose a semi-conductor device which comprises the features claimed in the new Claim 61, and in particular, Paoli fails to disclose a semi-conductor device having a first electrical contact which comprises the features of:

(a) a main elongated electrical contact (15) extending substantially longitudinally relative to the active region (10), and

(b) a plurality of spaced apart elongated secondary electrical contacts (16) electrically connected to the main contact (15), and extending from the main contact (15) in a direction generally transversely of the active region, the secondary contacts (16) and the main contact (15) together forming the actual contact areas and co-operating for defining the non-contact areas (21).

Furthermore, it is respectfully submitted that not only does Paoli fail to disclose or suggest such a first electrical contact comprising features (a) and (b) above, but Paoli also fails to suggest the provision of a semi-conductor device with such features (a) and (b) as set out above.

Paoli discloses a semi-conductor laser comprising a plurality of heterostructure layers including an active layer for producing and amplifying coherent radiation. Paoli discloses a first contact which is shaped to outline an area on the semi-conductor medium for determining the shape of the area of the active region. The device of Paoli also discloses a first contact which forms actual contact areas and non-contact areas. Such contact and non-contact areas are disclosed in Figs. 3b and 3c. However, it is respectfully submitted that nowhere in Paoli is there any disclosure nor is there any suggestion that the contact areas could be provided by a main elongated electrical contact extending substantially longitudinally relative to the active region and a plurality of spaced apart elongated secondary electrical contacts which are electrically connected to the main contact and extending from the main contact in a direction generally transversely of the active region. In the embodiment of Paoli disclosed with reference to Fig. 3c, the first electrical contact is provided by a plurality of elongated contacts which extend in a generally longitudinal direction only. In the embodiment of Fig. 3b, the electrical contacts are

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provided by a plurality of spaced apart contacts which Paoli refers to in his specification at Column 5, Line 17 as a plurality of open dots of varying size. Accordingly, it is respectfully submitted that Paoli fails to disclose or suggest the invention of the new Claim 61. In view of this, it is respectfully submitted that the new Claim 61 is novel and not obvious in the light of Paoli.

It is also respectfully submitted that none of the other prior art documents disclose or suggest a semi-conductor device comprising the features of the invention of the new Claim 61, and in particular, none of the other prior art documents disclose or suggest such a semi-conductor device with a first electrical contact comprising the features (a) and (b) as set out above.

Accordingly, it is respectfully submitted that not only is the invention of the new Claim 61 novel and not obvious in the light of Paoli, but furthermore, it is respectfully submitted that the invention of the new Claim 61 is novel and not obvious whether Paoli is considered on its own or combined with one or more of the other prior art documents. It is therefore respectfully submitted that the new Claim 61 should be allowable, and allowance is respectfully requested.

Once the Examiner is satisfied of the allowability of the new Claim 61, it is respectfully submitted that the remaining new Claims 62 to 74 which are dependent either directly or indirectly on the new Claim 61 should likewise be allowable, and allowance is respectfully requested.

New Claim 75 is a method claim, and includes features which correspond to the features of the new Claim 61. It is therefore respectfully submitted that once the Examiner is satisfied of

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the allowability of the new Claim 61, new Claim 75 should likewise be allowable, and allowance of the new Claim 75 is respectfully requested.

Since the remaining Claims 76 to 80 are dependent either directly or indirectly on the new Claim 75, it is respectfully submitted that once the Examiner is satisfied of the allowability of the new Claim 75, the new Claims 76 to 80 should likewise be allowable, and allowance are respectfully requested.

In view of the foregoing amendments and arguments it is submitted that new claims 61-80 inclusive are allowable and it is respectfully requested that these claims be allowed and the application passed to issue forthwith.

If for any reason the Examiner is unable to allow the application on the next Office Action and feels that an interview would be helpful to resolve any remaining issue, the Examiner is respectfully requested to contact the undersigned attorney for the purpose of arranging such an interview.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Robert V. Sloan
Registration No. 22,775



23373

L.A. Nolasco-Gilman et al. / *Journal of Great Lakes Research* 36 (2010) 79–87

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 1, 2, 6, 9, 11, 12, 16, 18-24, 31, 32, 46 and 48-50 are canceled.

Claims 61-80 inclusive are added as new claims.